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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/506,370	02/11/2005	Gregory Thomas Flitton	040857/282241	1070

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ALSTON & BIRD LLP  
BANK OF AMERICA PLAZA  
101 SOUTH TRYON STREET, SUITE 4000  
CHARLOTTE, NC 28280-4000

EXAMINER
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NGUYEN, TUAN HOANG

ART UNIT	PAPER NUMBER
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2618

MAIL DATE	DELIVERY MODE
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08/05/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/506,370	<b>Applicant(s)</b> FLITTON, GREGORY THOMAS	
	<b>Examiner</b> TUAN H. NGUYEN	<b>Art Unit</b> 2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 20 May 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-4,6-12 and 14-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4,6-12 and 14-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments, see applicant's remarks, filed on 05/20/2009, with respect to the rejection(s) of claims 1-4, 6-12 and 14-19 under 35 U.S.C § 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Malmivirta Kari et al. (International Publication Number WO 99/63764 hereinafter "Malmivirta") and Rimpela Riku et al. (International Publication Number WO 00/51380 hereinafter "Rimpela") and further in view of Vukovic et al. (U.S. PAT. 7,024,216 hereinafter "Vukovic").

### ***Election/Restrictions***

2. Applicant elects to prosecute the claims corresponding to species I, claims 1-4, 6-12 and 14-18 is acknowledged.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

Art Unit: 2618

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-2, 11, and 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Malmivirta Kari et al. (International Publication Number WO 99/63764 hereinafter "Malmivirta") in view of Rimpela Riku et al. (International Publication Number WO 00/51380 hereinafter "Rimpela") and further in view of Vukovic et al. (U.S. PAT. 7,024,216 hereinafter "Vukovic").

Consider claims 1 and 18, Malmivirta teaches testing a mobile telephone terminal comprising the steps of: transmitting from the test apparatus to the terminal on a downlink a predetermined data pattern which the terminal will recognize and which will prompt the terminal to transmit an access request on an uplink (page 3 lines 10-19); the terminal receiving said predetermined data pattern and responding by transmitting an access request to the test apparatus on the uplink (page 3 lines 20-23).

Malmivirta does not explicitly show that the test apparatus receiving the access request and analyzing the access request to assess the performance of the terminal based upon assessment of the access request alone.

In the same field of endeavor, Rimpela teaches the test apparatus receiving the access request and analyzing the access request to assess the performance of the terminal based upon assessment of the access request alone (page 14 lines 11-26).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use, the test apparatus receiving the access request and analyzing the access request to assess the performance of the terminal based

Art Unit: 2618

upon assessment of the access request alone, as taught by Rimpela, in order to provide the testing of the function of the mobile station and the channels can be directed to particularly those components of the mobile station whose functioning is to be confirmed e.g. in connection with type approval of the mobile station. Furthermore, the connection between the testing apparatus and the mobile station to be tested is a typical situation for the functioning of the system. It can be mentioned that testing methods used by different manufacturers will be unified, which improves the reliability of the testing.

Malmivirta and Rimpela, in combination fail to teach the test apparatus transmitting said predetermined data pattern multiple times at different power levels, and the test apparatus analyzing each access request to determine a power level threshold at which the terminal fails to transmit an access request.

However, Vukovic teaches the test apparatus transmitting said predetermined data pattern multiple times at different power levels (col. 1 line 62 through col. 2 line 10), and the test apparatus analyzing each access request to determine a power level threshold at which the terminal fails to transmit an access request (col. 5 lines 21-30).

Therefore, it is obvious to one of ordinary skill in the art at the time the invention was made to incorporate the disclosing of Vukovic into view of Malmivirta and Rimpela, in order for communication resource allocation that reduces the idle time of a demodulator and that increases the throughput of a communication channel and the capacity of a broadband communication system.

Art Unit: 2618

Consider claim 2, Malmivirta further teaches multiple predetermined data patterns are provided for testing the terminal under different operating conditions, each data pattern prompting a different response from the terminal in transmitting an access request (page 5 lines 24-36).

Consider claim 11, Malmivirta teaches testing a mobile telephone terminal, the test being structured and arranged to transmit a predetermined data pattern on a downlink to prompt a response from the terminal in the form of an access request on an uplink (page 3 lines 10-19).

Malmivirta does not explicitly show that the test apparatus being structured and arranged to analyze the access request and produce a test result based upon assessment of the access request alone.

In the same field of endeavor, Rimpela teaches the test apparatus being structured and arranged to analyze the access request and produce a test result based upon assessment of the access request alone (page 14 lines 11-26).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use, the test apparatus being structured and arranged to analyze the access request and produce a test result based upon assessment of the access request alone, as taught by Rimpela, in order to provide the testing of the function of the mobile station and the channels can be directed to particularly those components of the mobile station whose functioning is to be confirmed *e.g.* in connection with type approval of the mobile station. Furthermore, the connection

Art Unit: 2618

between the testing apparatus and the mobile station to be tested is a typical situation for the functioning of the system. It can be mentioned that testing methods used by different manufacturers will be unified, which improves the reliability of the testing.

Malmivirta and Rimpela, in combination fail to teach the test apparatus transmitting said predetermined data pattern multiple times at different power levels, and the test apparatus analyzing each access request to determine a power level threshold at which the terminal fails to transmit an access request.

However, Vukovic teaches the test apparatus transmitting said predetermined data pattern multiple times at different power levels (col. 1 line 62 through col. 2 line 10), and the test apparatus analyzing each access request to determine a power level threshold at which the terminal fails to transmit an access request (col. 5 lines 21-30).

Therefore, it is obvious to one of ordinary skill in the art at the time the invention was made to incorporate the disclosing of Vukovic into view of Malmivirta and Rimpela, in order for communication resource allocation that reduces the idle time of a demodulator and that increases the throughput of a communication channel and the capacity of a broadband communication system.

Consider claim 17, Malmivirta teaches test apparatus for testing a mobile telephone terminal, the test apparatus comprising a memory to store a predetermined data pattern and a transmitter to transmit predetermined data pattern on a downlink to mobile telephone terminal in order to prompt a response from mobile telephone terminal in the form of an access request on an uplink to the test apparatus (page 3 lines 10-23).

Malmivirta does not explicitly show that a receiver to receive said access request on the uplink from the terminal, and a processor to analyze said access request and produce an assessment of the performance of the terminal based upon assessment of the access request alone.

In the same field of endeavor, Rimpela teaches a receiver to receive said access request on the uplink from the terminal, and a processor to analyze said access request and produce an assessment of the performance of the terminal based upon assessment of the access request alone (page 14 lines 11-26).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use, a receiver to receive said access request on the uplink from the terminal, and a processor to analyze said access request and produce an assessment of the performance of the terminal based upon assessment of the access request alone, as taught by Rimpela, in order to provide the testing of the function of the mobile station and the channels can be directed to particularly those components of the mobile station whose functioning is to be confirmed *e.g.* in connection with type approval of the mobile station. Furthermore, the connection between the testing apparatus and the mobile station to be tested is a typical situation for the functioning of the system. It can be mentioned that testing methods used by different manufacturers will be unified, which improves the reliability of the testing.

Malmivirta and Rimpela, in combination fail to teach the test apparatus transmitting said predetermined data pattern multiple times at different power levels,



Art Unit: 2618

and the test apparatus analyzing each access request to determine a power level threshold at which the terminal fails to transmit an access request.

However, Vukovic teaches the test apparatus transmitting said predetermined data pattern multiple times at different power levels (col. 1 line 62 through col. 2 line 10), and the test apparatus analyzing each access request to determine a power level threshold at which the terminal fails to transmit an access request (col. 5 lines 21-30).

Therefore, it is obvious to one of ordinary skill in the art at the time the invention was made to incorporate the disclosing of Vukovic into view of Malmivirta and Rimpela, in order for communication resource allocation that reduces the idle time of a demodulator and that increases the throughput of a communication channel and the capacity of a broadband communication system.

Consider claim 19, Malmivirta further teaches a memory for storing the predetermined data pattern (page 8 lines 25-31), a generator for generating a signal corresponding to said predetermined data pattern on a downlink, said signal being adapted to be recognisable by the terminal and to trigger it to transmit an access request on an uplink (page 9 line 30 through page 10 line 6), and a detector for detecting and analyzing said access request to assess the performance of the terminal, and without replying to the terminal in response to said access request (page 11 lines 22-32).

Art Unit: 2618

5. Claims 3-4, 6-8, 12 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Malmivirta in view of Rimpela and Vukovic, and further in view of Mount et al. (U.S PAT. 6,272,337 hereinafter, "Mount").

Consider claim 3, Malmivirta, Rimpela and Vukovic, in combination fail to teach multiple predetermined data patterns are such that they each prompt the terminal to transmit an access request at a different power level.

However, Mount teaches multiple predetermined data patterns are such that they each prompt the terminal to transmit an access request at a different power level (col. 4 line 54 through col. 5 line 6).

Therefore, it is obvious to one of ordinary skill in the art at the time the invention was made to incorporate the disclosing of Mount into view of Malmivirta, Rimpela and Vukovic, in order to test a larger number of mobile units and to provide more movement patterns of the mobile units. Costs associated with testing may be reduced since simulation of mobile unit movement removes the need for having to actually physically move mobile units along desired paths during testing.

Consider claim 4, Mount further teaches multiple predetermined data patterns are such that they each specify a different maximum number of times the terminal should send an access request if the terminal receives a response to none of them (col. 7 lines 15-23).

Art Unit: 2618

Consider claim 6, Mount further teaches predetermined data pattern is transmitted to the terminal on a cable connection (col. 3 lines 41-47).

Consider claim 7, Mount further teaches predetermined data pattern is transmitted to the terminal over an air interface (col. 6 lines 9-17).

Consider claim 8, Mount further teaches the air interface is screened from other signals (col. 6 lines 9-17).

Consider claim 12, Mount further teaches generates multiple predetermined data patterns for testing the terminal under different operating conditions of transmission power level and/or maximum number of access requests to be transmitted if there is no response to any of them (col. 4 line 54 through col. 5 line 6 and col. 7 lines 15-23).

Consider claim 14, Mount further teaches connected to the terminal to transmit predetermined data pattern either by a cable connection or an air interface (col. 3 lines 41-47).

6. Claims 9-10 and 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Malmivirta in view of Rimpela and Vukovic, and further in view of Nelson, Jr. et al. (U.S. PUB. 2003/0028643 hereinafter, "Nelson").

Art Unit: 2618

Consider claims 9 and 15, Malmivirta, Rimpela and Vukovic, in combination, fail to disclose the access request is analyzed by a power measurement.

However, Nelson teaches the access request is analyzed by a power measurement (page 1 [0008]).

Therefore, it is obvious to one of ordinary skill in the art at the time the invention was made to incorporate the disclosing of Nelson into view of Malmivirta, Rimpela and Vukovic, in order to provide enhancing the utilization of resources in a wireless communication system.

Consider claims 10 and 16, Nelson further teaches the access request is analyzed by a modulation quality measurement (page 2 [0015] and [0016]).

### ***Conclusion***

7. Any response to this action should be mailed to:

Mail Stop\_\_\_\_\_ (Explanation, e.g., Amendment or After-final, etc.)

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Facsimile responses should be faxed to:

(571) 273-8300

Hand-delivered responses should be brought to:

Customer Service Window  
Randolph Building  
401 Dulany Street  
Alexandria, VA 22313

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TUAN H. NGUYEN whose telephone number is (571)272-8329. The examiner can normally be reached on 8:00Am - 5:00Pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on (571)272-7882882. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at (866) 217-9197 (toll-free).

/Tuan H. Nguyen/  
Examiner  
Art Unit 2618

Application/Control Number: 10/506,370  
Art Unit: 2618

Page 13